# FA Part 2 Mathematics Chapter 3 Test Online

| Sr | Questions | Answers Choice |
|---|---|---|
| 1 | Question Image | |
| 2 | Question Image | A. e<sup>ax</sup><br>B. f(x)<br>C. e<sup>ax</sup>f(x)<br>D. e<sup>ax + f(x)</sup> |
| 3 | If $y = x^2 + 1$ _____ x changes from 3 to 3.02 then dy = _____ | A. 0.1204<br>B. .12<br>C. .02<br>D. 1.2 |
| 4 | If the graph of f is entirely above the x-axis, then the definite integral is _____: | A. Positive<br>B. Positive or negative<br>C. Negative<br>D. Positive and negative |
| 5 | Question Image | C. 2<br>D. 1 |
| 6 | If the graph of f is entirely below the x-axis, then the definite integral is: | A. Positive<br>B. Positive or negative<br>C. Negative<br>D. Positive and negative |
| 7 | Question Image | A. Integration<br>B. Integrand<br>C. Constant of integration<br>D. None of these |
| 8 | Question Image | A. cos x + c<br>B. - cos x + c<br>C. sin x + c<br>D. -sin x + c |
| 9 | Question Image | A. ln \|sec x + tan x \| + c<br>B. ln \|cosec x - cot x \| + c<br>C. ln \|sec x - tan x \| + c<br>D. ln \|cosec x + cot x \| + c |
| 10 | Question Image | A. 0<br>B. 1<br>C. 2<br>D. 4 |
| 11 | The term dy (or df) = f '(x) dx is called the _____ of the dependent variable y. | A. Differentiation<br>B. Integration<br>C. Differential<br>D. None of these |
| 12 | Question Image | A. 36<br>B. 42<br>C. 48<br>D. 12 |
| 13 | Question Image | A. a cosec (ax + b)<br>D. cot (ax + b) |
| 14 | Question Image | A. equal to each other<br>B. not equal to each<br>C. nearly equal to each other<br>D. none of these |
| 15 | If y = sin x then dy = | A. cosy dx<br>B. cos x<br>C. cosx dx<br>D. cos xdy |
| 16 | Question Image | A. integration by parts<br>B. definite integral<br>C. Differentation<br>D. None of these |
| | | A. 1 |

| | | |
|---|---|---|
| 17 | The general solution of differential equation of order n contains n arbitrary constants, which can be determined by ---------- initial value conditions. | B. 0<br>C. 2<br>D. n |
| 18 | Question Image | A. Integration by parts<br>B. Definite integral<br>C. Differentiation<br>D. None of these |
| 19 | Question Image | A. Derivative<br>B. Differential<br>C. Integral<br>D. None of these |
| 20 | If the upper limit is a constant and the lower limit is a variable, then the integral is a function of: | A. x<br>B. y<br>C. lower limit<br>D. upper limit |